

TABLE M.5.6.1.2–5. —National Ignition Facility Accident Frequency and Risk (Median Meteorology)

Accident	MEI			Offsite Population ^a		Individual Noninvolved Worker		Noninvolved Worker Population	
	Frequency (per year)	Dose (rem)	LCFs ^b	Dose (person-rem)	LCFs ^c	Dose (rem)	LCFs ^b	Dose (person-rem)	LCFs ^c
Earthquake during No Action Alternative operations	2.00×10^{-8}	9.56×10^{-12}	5.74×10^{-15}	3.92×10^{-9}	2.35×10^{-12}	2.87×10^{-11}	1.72×10^{-14}	4.17×10^{-9}	2.50×10^{-12}
Earthquake during depleted uranium shot	2.00×10^{-9}	1.94×10^{-12}	1.16×10^{-15}	4.80×10^{-10}	2.88×10^{-13}	5.11×10^{-12}	3.06×10^{-15}	6.97×10^{-10}	4.18×10^{-13}
Earthquake during highly enriched uranium shot	2.00×10^{-9}	2.03×10^{-12}	1.22×10^{-15}	4.94×10^{-10}	2.97×10^{-13}	5.29×10^{-12}	3.17×10^{-15}	7.19×10^{-10}	4.31×10^{-13}
Earthquake during thorium shot	2.00×10^{-9}	2.08×10^{-12}	1.25×10^{-15}	4.86×10^{-10}	2.92×10^{-13}	5.31×10^{-12}	3.18×10^{-15}	7.15×10^{-10}	4.29×10^{-13}
Earthquake during tracer shot	2.00×10^{-9}	1.09×10^{-12}	6.53×10^{-16}	4.19×10^{-10}	2.51×10^{-13}	3.27×10^{-12}	1.96×10^{-15}	4.59×10^{-10}	2.75×10^{-13}
Earthquake during plutonium without yield shot	2.00×10^{-9}	3.30×10^{-12}	1.98×10^{-15}	1.09×10^{-9}	6.55×10^{-13}	9.99×10^{-12}	5.99×10^{-15}	1.48×10^{-9}	8.90×10^{-13}
Earthquake during plutonium with yield shot	2.00×10^{-9}	1.80×10^{-12}	1.08×10^{-15}	6.32×10^{-10}	3.79×10^{-13}	5.39×10^{-12}	3.23×10^{-15}	7.93×10^{-10}	4.76×10^{-13}

Source: LLNL 2003d.

^a Based on the population of approximately 6,900,000 persons residing within 50 miles of LLNL.^b Increased likelihood of a latent cancer fatality.^c Increased number of latent cancer fatalities.

LCFs = latent cancer fatalities; MEI = maximally exposed individual.